



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

D5039-1**Job Sheet 187765****Part No:** D5039-1**Job Qty:** 50 ea**Part Name:** Chain**Part Weight:** 0 lbs**Status:** New**Priority:** Medium**Job Created:** 12/17/18**Job Tracking No:****Due Date:** 12/21/18**Created By:** Chantal Lavoie**Type:** Stock**Description:****Note:** DWG REV B IPP REV:A 14.05.26 NEW ISSUE/ ECN14-567 DD VERF:JLM**Ship Via:****Bill of Materials****Job Routing**

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	Purchasing	50 pcs		12/21/18	0.00	0.00	Purchasing		JAN 07 2019
110	Packaging	50 pcs		12/21/18	0.00	0.00	Packaging2		JAN 07 2019
120	QC	50 pcs		12/21/18	0.00	0.00	QC6		JAN 07 2019
130	Packaging	50 pcs		12/21/18	0.00	0.00	Packaging3-2		JAN 08 2019
140	QC21-SA	50 Ea		12/21/18	0.00	0.00	QC21		JAN 08 2019

Part Op 110 - Receive & Inspect for Damage & Mat'l Certs
 Descriptions: 120 - QC6- All purchased or subcontracted products
 130 - Identify as per dwg & Stock Location:
 140 - QC21- Final Inspection - Work Order Release

P/O: 042020
 DEC 17 2018
 31
 13
 9-89

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
6264k85	Chain	50 ft (1 ea)	100-Purchasing	S142162

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
100-Purchasing	6264k85	50	0	0

Part Specifications

Specifications could not be found.

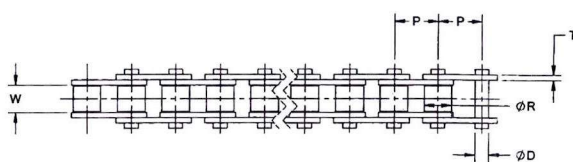


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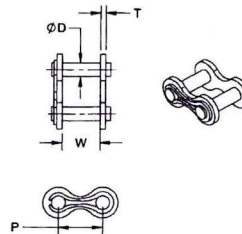
Plex 12/17/18 8:12 AM dart.lavoie.chantal

Container No: S142165**Part:** D5039-1**Job No:** 187765**Serial No/Batch:** S142165**Revision:****Inspector:****Exp Date:****Instructions:** Various STC's

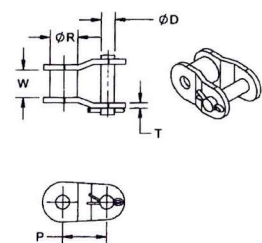
SPECIFICATION CONTROL DRAWING



D5039-1 CHAIN



D5039-3 MASTER LINK



D5039-5 HALF LINK

DART P/N	DESCRIPTION	MATERIAL	WEIGHT (LB/FT)	MANUFACTURER	MANUFACTURER P/N	VENDOR	VENDOR P/N	ALTERNATE VENDOR	ALTERNATE VENDOR P/N	P	W	T	D	R
D5039-1	CHAIN	304 SS	0.43	TSUBAKI	A140004	ACKLANDS GRAINGER	6L076	MCMaster CARR	6264K85	0.50	0.31	0.06	0.16	0.31
D5039-3	MASTER LINK	304 SS	0.43	TSUBAKI	RS40-SS-1	ACKLANDS GRAINGER	6L094	MCMaster CARR	6264K52	0.50	0.43	0.06	0.16	N/A
D5039-5	HALF LINK	304 SS	0.43	-	-	-	-	MCMaster CARR	6264K72	0.50	0.31	0.06	0.16	0.31

D5039-X CHAIN

RELEASED
2015-09-21
EEN 15-556

NOTES:

- 1) MATERIAL: SEE TABLE
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.7
- 7) WEIGHT: SEE TABLE

B	ADD ALTERNATE VENDOR: ZN B3-1, ADD -5, ZNB8-1, C2-1	VS	15.03.04
A	NEW ISSUE	AK	14.01.15
REV.	DESCRIPTION	BY	DATE
DESIGN	AK	DART AEROSPACE USA, INC.	
DRAWN	VS	KENT, WA	
CHECKED	AK	DRAWING NO.	REV. B
MFG. APPR.	JLM	D5039	SHEET 1 OF 1
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	CHAIN	NTS
DATE	15.03.04	COPYRIGHT © 2014 BY DART AEROSPACE USA, INC.	



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Tel (613) 632-5200

PURCHASE ORDER PO042020

Supplier: MCM001-VU
McMaster-Carr Supply Co,
P.O. Box 7690
Chicago, IL 60680-7690 USA
Phone: 330 995 5500
Fax: 330 995 9600

PO No: PO042020

PO Date: 12/17/18

Due Date: 12/20/18

Purchase Order

Revision:

Revision Date:

Ship-To Contact: Lavoie, Chantal
clavoie@dartaero.com

Via: Ground

Pymt Terms: 2% 10 Net 30

Freight Terms:

Special Comments:

**E-MAILED
DEC 17 2018**

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Items

Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1		188-FSCS-1032-1-1/4	92196A276 50/pk	Screw	Firmed	-	12/20/18	50 Ea	0 Ea	50 Ea	\$0.1714/Ea	\$8.57
2		2044T47	4 ft long	Tube Ø1.09	Firmed	-	12/20/18	20 ft	0 ft	20 ft	\$0.605/ft	\$12.10
Line Item Note: 5 pcs of 4 ft												
3		30806	7081K38 25 FT	8 Wire	Firmed	-	12/20/18	25 ft	0 ft	25 ft	\$3.02/ft	\$75.50
4		3755T17	2/pk	Lifting Oval Sleeve receive ea	Firmed	-	12/20/18	10 Ea	0 Ea	10 Ea	\$4.065/Ea	\$40.65
5		5/16-18 SS THREADED	98847A030 3 ft	Threaded Rod receive f	Firmed	-	12/20/18	6 ft	0 ft	6 ft	\$1.706666/ft	\$10.24
6		5274T761	5/pk	Polypropylene Vial for Flange Wrench Bolts receive ea	Firmed	-	12/20/18	10 Ea	0 Ea	10 Ea	\$1.744/Ea	\$17.44
7		5972K289		Bearing	Firmed	-	12/20/18	4 Ea	0 Ea	4 Ea	\$10.42/Ea	\$41.68
8		601.2045	6641A41	RTV (LOCTITE 598) : RTV, Loctite 598	Firmed	-	12/20/18	16 Ea	0 Ea	16 Ea	\$14.36/Ea	\$229.76
9		187765 6264k85		Chain receive pcs	Firmed	-	12/20/18	50 ft	0 ft	50 ft	\$14.98/ft	\$749.00
Line Item Note: AS PER DWG D5039 REV. B												
10		187766 6605K56	5/pk	Hook And Loop Tie D3551-11	Firmed	-	12/20/18	20 pcs	0 pcs	20 pcs	\$3.09/pcs	\$61.80
Line Item Note: AS PER DWG D3551 REV.A												



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PURCHASE ORDER **PO042020**

Items

Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
11		7856K74	25 ft	Heat Shrink Tubing, Ø19" ID Before, 25' Long receive pcs	Firmed	-	12/20/18	25 Ea	0 Ea	25 Ea	\$0.6224/Ea	\$15.56
12		8574K53	2 sf per pcs	Clear Polycarbonate Sheet, 24" x 24" x 1/8"	Firmed	-	12/20/18	2 sf	0 sf	2 sf	\$12.76/sf	\$25.52
13		90145A439	50/pk	Dowel Pin receive pcs	Firmed	-	12/20/18	50 Ea	0 Ea	50 Ea	\$0.1514/Ea	\$7.57
14		90145A443	50/pk	Dowel Pin	Firmed	-	12/20/18	50 Ea	0 Ea	50 Ea	\$0.2124/Ea	\$10.62
15		90576A118	50/pk	Cage Bumper Nut : same as C10-35	Firmed	-	12/20/18	50 pcs	0 pcs	50 pcs	\$0.1828/pcs	\$9.14
16		91268A967	1/pk	Lifting Bolt	Firmed	-	12/20/18	10 Ea	0 Ea	10 Ea	\$46.13/Ea	\$461.30
17		91257A758	1/pack	Bolt Grade 8 Steel, 1/2"-20 Thread, 5-1/2" Long Partially Threaded	Firmed	-	12/20/18	4 Ea	0 Ea	4 Ea	\$3.00/Ea	\$12.00
18		92185A564	10/pk	Screw 1/4-28 Unf	Firmed	-	12/20/18	10 Ea	0 Ea	10 Ea	\$0.73/Ea	\$7.30
19		92196A139	25/pk	SCREW 6-32 x 1/8" SS	Firmed	-	12/20/18	25 Ea	0 Ea	25 Ea	\$0.3256/Ea	\$8.14
20		93475A280	50/pk	Washer	Firmed	-	12/20/18	50 Ea	0 Ea	50 Ea	\$0.122/Ea	\$6.10
21		94748A429	1/pk	SS Knob-Grip Push-Button Quick Release Pin 3/8" Dia. x 2-1/2" Long	Firmed	-	12/20/18	5 Ea	0 Ea	5 Ea	\$39.70/Ea	\$198.50
22		MT-O1-B-0.375X0.500	9516K101 6 ft	Tool Steel Bar 0.375" X 0.500"	Firmed	-	12/20/18	6 ft	0 ft	6 ft	\$13.22666/ft	\$79.36
23		97395A451	10/pk	Dowel Pin receive ea	Firmed	-	12/20/18	40 Ea	0 Ea	40 Ea	\$0.853/Ea	\$34.12
24		97395A491	10/pk	SS Dowel Pin 1/4" Dia. x 1" Lg.	Firmed	-	12/20/18	10 Ea	0 Ea	10 Ea	\$1.379/Ea	\$13.79
25		97526A421	97526A160 100/pk	Rivet receive ea	Firmed	-	12/20/18	100 Ea	0 Ea	100 Ea	\$0.1872/Ea	\$18.72



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PURCHASE ORDER **PO042020**

Items

Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
26		97633A475	5/pk	External Retaining Ring for 2-7/8" OD.	Firmed	-	12/20/18	5 Ea	0 Ea	5 Ea	\$1.848/Ea	\$9.24
27	187769	9776K33	75 ft roll	Hook And Loop Strip 1" D3800-3-100	Firmed	-	12/20/18	75 ft	0 ft	75 ft	\$1.2078666/ft	\$90.59
Line Item Note AS PER DWG D3800 REV. B												
28		98381A544	25/pk	Dowel Pin, Large Ø 1/4 X 1-1/4	Firmed	-	12/20/18	25 Ea	0 Ea	25 Ea	\$0.2836/Ea	\$7.09
29		98381A667	5/pk	Dowel Pin	Firmed	-	12/20/18	10 Ea	0 Ea	10 Ea	\$1.816/Ea	\$18.16
30		98758A516	1/pk	Steel Thread Rod 1/2"-13 x 3-1/2" Long receive ea	Firmed	-	12/20/18	6 Ea	0 Ea	6 Ea	\$2.33/Ea	\$13.98
31		MC1095S.020	9036K499	C1095 Blue Tempered Spring Steel Sheet .020 : McMaster P/N: 9036K499 X 1 PK MIL-B-5687D BLUE FINISHED AND POLISHED 1095 SPRING STEEL .020 6" X 20' COIL receive sf	Firmed	-	12/20/18	10 sf	0 sf	10 sf	\$7.6075/sf	\$76.08
Line Item Note 1 P[CS OF 6" X 20 FT = 10 SF												
32		MDELRLNR0.375	8576K13 5 ft	M Delrin Round Bar, Black	Firmed	-	12/20/18	5 ft	0 ft	5 ft	\$0.74/ft	\$3.70
33		MT-O1-B-0.500X12.000	9516K527 3 FT	AISI.01 TOOL STEEL BAR 0.500" High X 12.000" Wide	Firmed	-	12/20/18	3 ft	0 ft	3 ft	\$145.65666/ft	\$436.97
34		MT-O1-R0.375	8893K239 6 ft	Tool Steel Round Bar 0.375 dia.	Firmed	-	12/20/18	6 ft	0 ft	6 ft	\$2.593333/ft	\$15.56
35		MT-O1-R0.625	8893K9 6 FT	Tool Steel Round Bar 0.625 dia.	Firmed	-	12/20/18	6 ft	0 ft	6 ft	\$5.1366666/ft	\$30.82
Grand Total:											\$2,856.66	



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PURCHASE ORDER PO042020

Order Notes

Procurement Quality Clauses

A005 RIGHT OF ENTRY

A016 PERSONNEL QUALIFICATION

A026 CERTIFICATION OF MATERIAL CONFORMANCE

A032 DOCUMENT SPECIAL REQUIREMENTS

A033 STATEMENT OF CONFORMITY/TEST RECORDS FOR NAS, AN and MS FASTENERS

A040 NOTIFICATION OF QUALITY ESCAPE

A041 QUALITY MANAGEMENT SYSTEM

A042 DART NOTIFICATION BY SUPPLIER

A043 RETENTION OF QUALITY DOCUMENTS

A048 COUNTERFEIT PARTS AVOIDANCE, DETECTION, MITIGATION AND DISPOSITION PROGRAM

A049 SUPPLIER AWARENESS

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 12/17/18 8:53 AM dart.lavoie.chantal

200 Aurora Industrial Pkwy
Aurora OH 44202-8087
330-995-5500
cle.sales@mcmaster.com

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Purchase Order
PO042020

Order Placed By
Chantal Lavoie

McMaster-Carr Number
5473390-02

Page 1 of 2

12/17/2018

Line	Product	Ordered	Shipped	
1	92196A276 18-8 Stainless Steel Socket Head Screw, 10-32 Thread Size, 1-1/4" Long, Partially Threaded, Packs of 50	1 Pack	1	
2	2044T47 Round Cut-to-Length Shipping Tube, 1.09" ID, 48" Inside Length	5 Each	5	
3	7081K38 Cable, SOOW, Black Outer Insulation, 16 Gauge, 8 Wires, 25' Long	25 Feet	25	
4	3755T17 Wire Rope Compression Sleeve - for Lifting for Stainless Steel and Steel Rope, 18-8 Stainless Steel, for 3/16" Rope Diameter, Packs of 2	5 Packs	5	
5	98847A030 18-8 Stainless Steel Threaded Rod, 5/16"-18 Thread Size, 3 Feet Long, Packs of 1	2 Packs	2	
6	5274T761 Polypropylene Plastic Vials with Tight Fitting Lid, 1.9 oz./55 ml Capacity, Packs of 5	2 Packs	2	
7	5972K289 Ball Bearing, Sealed, Trade No. 6903-2RS, for 17 mm Shaft Diameter	4 Each	4	
8	6641A41 Flexible Gasket Maker Sealant, Loctite 598, 2.36 oz. Tube	16 Each	16	
9	6264K85 Single Strand Corrosion-Resistant Roller Chain, ANSI Number 40-SS, 1/2" Pitch, 50 Feet Long	1 Each	1	DAS 38 9-89
10	6605K56 Hook and Loop Cable Ties, 24" Overall Length, Meets UL 94V2, Packs of 5	4 Packs	4	
11	7856K74 Heat-Shrink Tubing, 25 Feet Long, 0.19" ID Before Shrinking, Black	1 Each	1	
12	8574K53 Clear Polycarbonate Sheet, 24" x 24" x 1/8"	1 Each	1	
13	90145A439 18-8 Stainless Steel Dowel Pin, 3/32" Diameter, 9/16" Long, Packs of 50	1 Pack	1	53 extra
14	90145A443 18-8 Stainless Steel Dowel Pin, 3/32" Diameter, 1" Long, Packs of 50	1 Pack	1	
15	90576A118 Medium-Strength Steel Nylon-Insert Locknut, Class 8, Zinc-Plated, M10 x 1.5 mm Thread, Packs of 50	1 Pack	1	
16	91268A967 High-Strength Grade 8 Steel Hex Head Screw, 1-1/2"-6 Thread Size, 12" Long, Packs of 1	10 Packs	10	
17	91257A758 Zinc Yellow-Chromate Plated Hex Head Screw, Grade 8 Steel, 1/2"-20 Thread, 5-1/2" Long, Partially Threaded, Packs of 1	4 Packs	4	
18	92185A564 Super-Corrosion-Resistant 316 Stainless Steel Socket Head Screw, 1/4"-28 Thread Size, 1" Long, Packs of 10	1 Pack	1	
19	92196A139 18-8 Stainless Steel Socket Head Screw, 6-32 Thread Size, 1/8" Long, Packs of 25	1 Pack	1	

Packing List

200 Aurora Industrial Pkwy
Aurora OH 44202-8087
330-995-5500
cle.sales@mcmaster.com

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury ON K6A 1K7
Canada

Purchase Order
PO042020 ✓
Order Placed By
Chantal Lavoie

Page 2 of 2
12/17/2018

McMaster-Carr Number
5473390-02

Line	Product	Ordered	Shipped
20	93475A280 18-8 Stainless Steel Washer for M10 Screw Size, 10.5 mm ID, 20 mm OD, Packs of 50	51 1 Pack	1 ✓ 1 extra
21	94748A429 Knob-Grip Push-Button Quick-Release Pin with Lanyard, 3/8" Diameter, 2-1/2" Usable Length	5 Each	5 ✓
22	9516K101 Tight-Tolerance Multipurpose O1 Tool Steel Bar, 3/8" Thick, 1/2" Wide, 6 Feet Long	1 Each	1 ✓
23	97395A451 Dowel Pin, 316 Stainless Steel, 1/8" Diameter, 3/4" Long, Packs of 10	4 Packs	4 ✓
24	97395A491 Dowel Pin, 316 Stainless Steel, 1/4" Diameter, 1" Long, Packs of 10	1 Pack	1 ✓
25	97526A421 Domed Head Blind Rivets, 3/16" Diameter, for 0.3760"-0.5" Material Thickness, Black, Packs of 100	1 Pack	1 ✓ 1 missing
26	97633A475 External Retaining Ring for 2-7/8" OD, Black-Phosphate 1060-1090 Spring Steel, Packs of 5	1 Pack	1 ✓
27	9776K33 Flame-Retardant Hook, 1" Wide x 75 Feet Long	1 Each	1 ✓
29	98381A667 Dowel Pin, Alloy Steel, 7/16" Diameter, 3/4" Long, Packs of 5	2 Packs	2 ✓
30	98758A516 Medium-Strength Threaded Rod, Grade B7 Black-Oxide Steel, 1/2"-13 Thread Size, 3-1/2" Long	6 Each	6 ✓
31	9036K499 Wear-Resistant 1095 Spring Steel, 0.0200" Thick, 6" Wide, 20 Feet Long	1 Each	1 ✓
32	8576K13 Black Delrin® Acetal Resin Rod, 3/8" Diameter, 5 Feet Long	5 Feet	5 ✓
33	9516K527 Tight-Tolerance Multipurpose O1 Tool Steel Bar, 1/2" Thick, 12" Wide, 3 Feet Long	1 Each	1 ✓
34	8893K239 Tight-Tolerance Multipurpose O1 Tool Steel Rod, 0.3750" Diameter, 6 Feet Long	1 Each	1 ✓
35	8893K9 Tight-Tolerance Multipurpose O1 Tool Steel Rod, 0.6250" Diameter, 6 Feet Long	1 Each	1 ✓

Shipped separately from our Chicago warehouse on 12/17

28	98381A544 Dowel Pin, Alloy Steel, 1/4" Diameter, 1-1/4" Long	1 Pack	1
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